

# COMMONWEALTH of VIRGINIA

Douglas W. Domenech Secretary of Natural Resources

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# **DEPARTMENT OF ENVIRONMENTAL QUALITY**Blue Ridge Regional Office

www.deq.virginia.gov

David K. Paylor Director

Robert J. Weld Regional Director

Roanoke Office

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#### STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

This permit includes designated equipment subject to National Emission Standards for Hazardous Air Pollutants for Source Categories.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

INGENCO Renewable Development, LLC 2250 Dabney Road Henrico, VA 23230 Registration No.: 21548

a landfill gas to electricity generating plant
located at

7100 Cloyd's Mountain Road, Pulaski County
in accordance with the Conditions of this permit.

Approved on DRAFT.

Robert J. Weld
Regional Director

Permit consists of 13 pages. Permit Conditions 1 to 33.

# **INTRODUCTION**

This permit approval is based on the permit application dated July 15, 2011, including amendment information dated August 14, 2011, December 14, 2011, February 10, 2012, March 30, 2012, June 1, 2012, July 11, 2012 and October 30, 2012. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-20 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

#### **PROCESS REQUIREMENTS**

1. **Equipment List** - Equipment at this facility consists of the following:

Equipment to be Constructed				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	
A1- A6 Stack S-1	6 Detroit Diesel Series 60 Engines (date of construction 1995-1998)/ 350kW generators – Distillate fuel, biodiesel, landfill gas	475 BHP each	MACT Subpart ZZZZ	
B1- B6 Stack S-2	6 Detroit Diesel Series 60 Engines (date of construction 1995-1998)/ 350kW generators – Distillate fuel, biodiesel, landfill gas	475 BHP each	MACT Subpart ZZZZ	

Boiler	Burnham Model: RSA1351N-TB –	0.133	Subpart JJJJJJ
	Distillate fuel	MMBtu/hour	
T-1	Distillate/biodiesel fuel oil tank	12,000 gallons	NA
T-2	Lubricating Oil	500 gallons	NA
T-3	Used lubricating oil	500 gallons	NA
T-4	Distillate fuel oil tank	275 gallons	NA

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.

(9 VAC 80-1180 D 3)

- 2. Emission Controls Nitrogen Dioxide emissions from each engine (Al-A6 & Bl-B6) shall be controlled by turbo-charging and inlet charge-air cooling. Each cooling system shall maintain an hourly average inlet charge-air temperature not greater than 140°F. The turbo charger and inlet charge-air cooler shall be provided with adequate access for inspection and shall be in operation when the respective engine (Al-A6 & Bl-B6) is operating. (9 VAC 5-50-260 and 9 VAC 5-80-1180)
- **3. Emission Controls** The landfill gas treatment system, at a minimum shall be composed of a de-watering process, filtration, and compression. The landfill gas treatment system shall be provided with adequate access for inspection and shall be in operation when any of the engines (Al-A6 & Bl-B6) are operating on landfill gas. (9 VAC 5-50-260 and 9 VAC 5-80-1180)
- **4. Monitoring Devices** The engines (A1-A6 & B1-B6) shall be equipped with devices to continuously measure and record the total consumption of landfill gas, distillate fuel and biodiesel fuel by the engines (Al-A6 & Bl-B6). Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective engine is operating.

(9 VAC 5-50-20 C and 9 VAC 5-80-1180)

- 5. Monitoring Devices Each engine (A1-A6 & B1-B6) shall be equipped with devices to continuously measure and record the amount of liquid fuel combusted in each engine (Al-A6 & Bl-B6). The devices shall measure no less frequently than once per minute. Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective engine is operating. (9 VAC 5-50-20 C and 9 VAC 5-80-1180)
- **6. Monitoring Devices** Each of the engines (A1-A6 & B1-B6) shall be equipped with a device to continuously measure engine inlet charge-air temperature. Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or

recommendations. Each device shall be provided with adequate access for inspection and shall be in operation when the respective engine is operating. (9 VAC 5-50-20 C and 9 VAC 5-80-1180)

7. Monitoring Devices – The landfill gas transport system shall be equipped with a device to continuously measure the differential pressure drop across the landfill gas filter. At a minimum, devices shall be located just before and just after the filter and after the completed treatment process. Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each device shall be provided with adequate access for inspection and shall be in operation whenever any engine is operating on landfill gas.

(9 VAC 5-50-20 C and 9 VAC 5-80-1180)

**8. Monitoring Device Observation** – To ensure good performance, the devices used to continuously measure the differential pressure drop across the landfill gas filter shall be observed by the facility with a frequency of not less than once per day whenever treated landfill gas is combusted in any of the engines (A1-A6 & B1-B6). The facility shall keep a log of the observations..

(9 VAC 5-80-1180 D and 9 VAC 5-50-50 F)

**9. Monitoring Device Observation -** The monitoring devices used to measure inlet charge-air temperature shall be observed by the facility with a frequency of not less than once per hour whenever the engines (A1-A6 & B1-B6) are operating. The facility shall keep a daily log of the temperature observations of the devices and the time the observation was recorded. (9 VAC 5-80-1180 D and 9 VAC 5-50-50 F)

# **OPERATING LIMITATIONS**

- **10. Operating Hours** Each engine (Al-A6 & Bl-B6) shall not operate more than 500 hours per year in Mode 1 operation. For the purpose of this permit, Mode 1 operation is defined as follows:
  - a. For any one-hour period where the engine began combusting fuel (i.e., started up), the engine is in Mode 1 operation for the one-hour period when more than 2.8 gallons of liquid fuel is combusted in that one-hour period.
  - b. For any one-hour period where the engine did not have a start-up, the engine is in Mode 1 operation for the one-hour period when more than 2.2 gallons of liquid fuel are combusted in that one-hour period.

Mode 2 operation is any other operation not defined as Mode 1 operation in Condition 10.a and 10.b above.

Annual hours of operation shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-1180)

- **11. Fuel** The approved fuels for the engines (Al-A6 & Bl-B6) is distillate fuel, biodiesel fuel and landfill gas. A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-1180)
- **12. Fuel Specifications** The fuels for the facility shall meet the specifications below:

DISTIILLATE FUEL which meets the ASTM D396 specification for Grades 1 or 2 Maximum sulfur content per shipment: 0.0015%

BIODIESEL FUEL which meets the ASTM D6751 specification: Maximum sulfur content per shipment: 0.0015%

(9 VAC 5-80-1180 and 9 VAC 5-50-260)

- **13. Fuel Certification** The permittee shall obtain a certification from the fuel supplier with each shipment of 1 or 2 distillate fuel or biodiesel fuel. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier;
  - b. The date on which the distillate fuel or biodiesel fuel was received;
  - c. The quantity of distillate fuel or biodiesel fuel delivered in the shipment;
  - d. A statement that the distillate fuel complies with the American Society for Testing and Materials specifications (ASTM D975) for Grades 1 or 2; or a statement that the biodiesel fuel complies with the American Society for Testing and Materials specification (ASTM D6751);
  - e. The sulfur content of the distillate fuel or biodiesel fuel.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 12. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits. (9 VAC 5-80-1180)

#### **EMISSION LIMITS**

**14.** Emission Limits – Emissions from A1-A6 (S1) & B1-B6 (S2) shall not exceed the emissions limit calculated using the equation below.

EL for S1 = 
$$A_{1-6}$$
 (g) x ER (g) +  $A_{1-6}$  (d) x ER (d)  
EL for S2 =  $B_{1-6}$  (g) x ER (g) +  $B_{1-6}$  (d) x ER (d)

#### Where:

 $A_{1-6}(g)$  = number of engines A1-A6 in Mode 2 operation.

 $A_{1-6}(d)$  = number of engines A1-A6 in Mode 1 operation.

 $B_{1-6}(g)$  = number of engines B1-B6 in Mode 2 operation.

 $B_{1-6}(d)$  = number of engines B1-B6 in Mode 1 operation.

$$EL$$
 for  $S1 = emission$  limit of pollutant for  $Stack$   $S1$   $EL$  for  $S2 = emission$  limit of pollutant for  $Stack$   $S2$ 

 $ER(g) = emission \ rate \ of \ pollutant \ for \ each \ engine \ in \ Mode \ 2 \ operation*$ 

\*NOx ER(g) is 2.5 lb/hr per engine. CO ER(g) is 3.0 lb/hr per engine. PM10 ER(g) is 1.1 lb/hr per engine. VOC ER(g) is 1.5 lb/hr per engine.

ER(d) = emission rate of pollutant for each engine in Mode 1 operation\*\*

\*\*NOx ER(d) is 7.2 lb/hr per engine. CO ER(d) is 3.9 lb/hr per engine. PM10 ER(d) is 1.1 lb/hr per engine. VOC ER(d) is 1.5 lb/hr per engine.

(9 VAC 5-80-1180 and 9 VAC 5-50-260)

**15. Emission Limits** - Emissions from the operation of the facility (Ref. Nos. A1-A6 (S1) & B1-B6 (S2) combined) shall not exceed the limits specified below:

PM10 57.8 tons/yr

Nitrogen Oxides 146.0 tons/yr

(as NO<sub>2</sub>)

Carbon Monoxide 160.4 tons/yr

Volatile Organic 78.8 tons/yr

Compounds

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 10, 11, 12, and 14. (9 VAC 5-80-1180 and 9 VAC 5-50-260)

**16. Visible Emission Limit** - Visible emissions from the engines (Al-A6 & Bl-B6) stacks (S1–S2) shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20% percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-1180 and 9 VAC 5-50-260)

# **RECORDS**

- **17. On Site Records** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
  - a. Hourly, monthly and annual consumption of landfill gas, distillate fuel, and biodiesel. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period; Annual consumption of each fuel shall be calculated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - b. Hourly records of engine inlet charge-air temperature reading to verify compliance with Condition 2;
  - c. Records to demonstrate compliance with the operating hour limitations outlined in Condition 10, including but not limited to, all data and calculations in determining Mode 1 operation;
  - d. Results of all calibrations and tests to verify or modify the calculations utilized to determine liquid fuel consumption from injector pulse duration;
  - e. Monthly and annual emission (in tons) from the engines (Al-A6 & Bl-B6) stacks (S1–S2) using calculation methods approved by the Blue Ridge Regional Office to verify compliance with ton/yr emission limitations in Condition 15. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period;
  - f. Results of all stack tests, visible emission evaluations and performance evaluations;
  - g. All fuel supplier certifications;

- h. Scheduled and unscheduled maintenance on the engines;
- i. Operating procedures and operator training records for the engines; and
- j. The observation log for the purpose of recording the differential pressure drop across the landfill gas filter as required by Conditions 7 and 8.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50 and 9 VAC 5-50-1180)

# **COMPLIANCE DETERMINATION**

- 18. Emissions Testing The facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and provided a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

  (9 VAC 5-50-30 F and 9 VAC 5-80-1180)
- 19. Stack Testing The permittee shall conduct an initial performance test for NOx, CO, VOCs and PM10 from one set of engines (A1-A6 orB1-B6) at either stack (S1 or S2) to determine compliance with the emission limits contained in Condition 14. The tests shall be performed while operating each engine on 100% distillate fuel. The tests for NOx, CO, VOCs, and PM10 shall be conducted concurrently. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum expected operating rate for each set of engines, [S1 – (A1-A6)] or [S2 – (B1-B6)], but in no event later than 180 days after start-up of any engine installation. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Blue Ridge Regional Office. For lab testing only, not field testing, samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories. The permittee shall submit a test protocol at least thirty (30) days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-30 and 9 VAC 5-80-1200)
- **20. Stack Testing** The permittee shall conduct an initial performance test for NOx, CO, VOCs and PM10 from one set of engines (A1-A6 or B1-B6) at either stack (S1 or S2) to determine compliance with the emission limits contained in Condition 14. The tests shall be performed while operating each engine on 100% biodiesel fuel. The tests for NOx, CO, VOCs, and PM10 shall be conducted concurrently. The tests shall be performed and demonstrate compliance within 60 days of start-up on firing biodiesel for each set of

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engines, [S1 – (A1-A6)] or [S2 – (B1-B6)]. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Blue Ridge Regional Office. For lab testing only, not field testing, samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories. The permittee shall submit a test protocol at least thirty (30) days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-30 and 9 VAC 5-80-1200)

- 21. Stack Testing The permittee shall conduct an initial performance test for NOx, CO, VOCs and PM10 from one set of engines (A1-A6 or B1-B6) at either stack (S1 or S2) to determine compliance with the emission limits contained in Condition 14. The tests shall be performed while operating each engine in dual fuel mode using 92% landfill gas fraction, unless a lower gas fraction is determined to be normal operation. The tests for NOx, CO, VOCs and PM10 shall be conducted concurrently. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum expected operating rate for each set of engines, [S1 – (A1-A6)] or [S2 – (B1-B6)], but in no event later than 180 days after start-up of any engine installation. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Blue Ridge Regional Office. For lab testing only, not field testing, samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories. The permittee shall submit a test protocol at least thirty (30) days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-30 and 9 VAC 5-80-1200)
- 22. Stack Testing The permittee shall conduct subsequent performance tests for NOx, CO, VOCs and PM10 from one set of engines (A1-A6 or B1-B6) at each stack (S1 or S2) to determine compliance with the emission limits contained in Condition 14. The tests required shall at a minimum be conducted once every five years, with each engine set rotated for testing purposes (i.e. A1-A6 tested first, then rotate B1-B6 in 5 years). The tests shall be performed as outlined in Conditions 19, 20, and 21 above. The tests for NOx, CO, VOCs and PM10 shall be conducted concurrently. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Blue Ridge Regional Office. For lab testing only, not field testing, samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories. The permittee shall submit a test protocol at least thirty (30) days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

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(9 VAC 5-50-30 and 9 VAC 5-80-1200)

23. Visible Emissions Evaluation - Concurrently with the initial and subsequent performance tests required in Conditions 19, 20, and 21, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the facility on those engines (tested). Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Blue Ridge Regional Office. The facility shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed, and reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the engine installation. Should conditions prevent concurrent opacity observations, the Blue Ridge Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test result shall be submitted to the Blue Ridge Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-30 and 9 VAC 5-80-1200)

#### **NOTIFICATIONS**

- **24. Initial Notifications** The permittee shall furnish written notification to the Blue Ridge Regional Office of:
  - a. The actual date on which construction of each of the engines commenced within 30 days after such date.
  - b. The anticipated start-up date for each of the engines postmarked not more than 60 days nor less than 30 days prior to such date.
  - c. The actual start-up date for each of the engines within 15 days after such date.
  - d. The actual start-up date for each of the engines when fired on biodiesel within 15 days after such date.
  - e. The anticipated date of performance tests of the landfill gas to electricity generating plant postmarked at least 30 days prior to such date.

(9 VAC 5-50-50 and 9 VAC 5-80-1180)

#### **GENERAL CONDITIONS**

**25. Permit Invalidation** – This permit to construct the landfill gas to electricity generating facility shall become invalid, unless an extension is granted by the DEQ, if:

- a. A program of continuous construction, reconstruction, or modification is not commenced within the latest of the following:
  - i. 18 months from the date of this permit; or
  - ii. Nine months from the date that the last permit or other authorization was issued from any other governmental entity;
  - iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or
- b. A program of construction, reconstruction, or modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.

(9 VAC 5-80-1210)

- **26. Permit Suspension/Revocation** This permit may be suspended or revoked if the permittee:
  - a. Knowingly makes material misstatements in the permit application or any amendments to it;
  - b. Fails to comply with the conditions of this permit;
  - c. Fails to comply with any emission standards applicable to a permitted emissions unit;
  - d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or
  - e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9 VAC 5-80-1210 F)

- **27. Right of Entry** The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
  - a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
  - To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency. (9 VAC 5-170-130 and 9 VAC 5-80-1180)

**28. Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

**29. Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record

(9VAC 5-20-180 J and 9 VAC 5-80-1180 D)

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**30. Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Blue Ridge Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Blue Ridge Regional Office.

(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

- **31. Violation of Ambient Air Quality Standard** The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated. (9 VAC 5-20-180 I and 9 VAC 5-80-1180)
- **32. Change of Ownership** In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Blue Ridge Regional Office of the change of ownership within 30 days of the transfer.

(9 VAC 5-80-1240)

**33. Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.

(9 VAC 5-80-1180)

# SOURCE TESTING REPORT FORMAT

### Report Cover

- 1. Plant name and location
- 2. Units tested at source (indicate Ref. No. used by source in permit or registration)
- 3. Test Dates.
- 4. Tester; name, address and report date

#### Certification

- 1. Signed by team leader/certified observer (include certification date)
- 2. Signed by responsible company official
- 3. \*Signed by reviewer

# Copy of approved test protocol

#### Summary

- 1. Reason for testing
- 2. Test dates
- 3. Identification of unit tested & the maximum rated capacity
- 4. \*For each emission unit, a table showing:
  - a. Operating rate
  - b. Test Methods
  - c. Pollutants tested
  - d. Test results for each run and the run average
  - e. Pollutant standard or limit
- 5. Summarized process and control equipment data for each run and the average, as required by the test protocol
- 6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
- 7. Any other important information

#### Source Operation

- 1. Description of process and control devices
- 2. Process and control equipment flow diagram
- 3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

#### Test Results

- 1. Detailed test results for each run
- 2. \*Sample calculations
- 3. \*Description of collected samples, to include audits when applicable

#### **Appendix**

- 1. \*Raw production data
- 2. \*Raw field data
- 3. \*Laboratory reports
- 4. \*Chain of custody records for lab samples
- 5. \*Calibration procedures and results
- 6. Project participants and titles
- 7. Observers' names (industry and agency)
- 8. Related correspondence
- 9. Standard procedures

<sup>\*</sup> Not applicable to visible emission evaluations